

Release notes for ENDF/B Development n-034_Se_076
evaluation

ENDF
B-VII.dev

April 26, 2017

- checkr Warnings:

1. A previous error halted parsing of the current section
MAT=3431, MF= 1, MT=451 (1): Parsing stopped

```
ERROR(S) FOUND IN MAT=3431, MF= 1, MT=451
SECTION CANNOT BE CHECKED FROM SEQUENCE NUMBER      240 TO      326
```

- checkr Errors:

1. A variable is outside the allowed ENDF range
MAT=3431, MF= 1, MT=451 (0): Variable range

```
ERROR(S) FOUND IN MAT=3431, MF= 1, MT=451
MOD =      1 OUT OF RANGE      0 -      0      RECORD NUMBER      240
```

2. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 2, MT=151 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=3431, MF= 2, MT=151
SECTION 2/151 NOT IN DIRECTORY      RECORD NUMBER      328
```

3. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 1 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 1
SECTION 3/ 1 NOT IN DIRECTORY      RECORD NUMBER      428
```

4. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 2 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 2
SECTION 3/ 2 NOT IN DIRECTORY      RECORD NUMBER      462
```

5. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 4 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 4
SECTION 3/ 4 NOT IN DIRECTORY      RECORD NUMBER      496
```

6. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 16 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 16
SECTION 3/ 16 NOT IN DIRECTORY      RECORD NUMBER      518
```

7. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 17 (0): Directory (b)

ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 17
SECTION 3/ 17 NOT IN DIRECTORY RECORD NUMBER 527

8. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 22 (0): Directory (b)

ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 22
SECTION 3/ 22 NOT IN DIRECTORY RECORD NUMBER 532

9. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 28 (0): Directory (b)

ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 28
SECTION 3/ 28 NOT IN DIRECTORY RECORD NUMBER 545

10. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 51 (0): Directory (b)

ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 51
SECTION 3/ 51 NOT IN DIRECTORY RECORD NUMBER 556

11. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 52 (0): Directory (b)

ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 52
SECTION 3/ 52 NOT IN DIRECTORY RECORD NUMBER 578

12. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 53 (0): Directory (b)

ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 53
SECTION 3/ 53 NOT IN DIRECTORY RECORD NUMBER 598

13. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 54 (0): Directory (b)

ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 54
SECTION 3/ 54 NOT IN DIRECTORY RECORD NUMBER 618

14. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 55 (0): Directory (b)

ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 55
SECTION 3/ 55 NOT IN DIRECTORY RECORD NUMBER 637

15. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 56 (0): Directory (b)

- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 56 | RECORD NUMBER | 655 |
| SECTION 3/ 56 NOT IN DIRECTORY | | |
16. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 57 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 57 | RECORD NUMBER | 673 |
| SECTION 3/ 57 NOT IN DIRECTORY | | |
17. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 58 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 58 | RECORD NUMBER | 690 |
| SECTION 3/ 58 NOT IN DIRECTORY | | |
18. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 59 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 59 | RECORD NUMBER | 707 |
| SECTION 3/ 59 NOT IN DIRECTORY | | |
19. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 60 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 60 | RECORD NUMBER | 723 |
| SECTION 3/ 60 NOT IN DIRECTORY | | |
20. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 61 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 61 | RECORD NUMBER | 739 |
| SECTION 3/ 61 NOT IN DIRECTORY | | |
21. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 62 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 62 | RECORD NUMBER | 755 |
| SECTION 3/ 62 NOT IN DIRECTORY | | |
22. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 63 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 63 | RECORD NUMBER | 770 |
| SECTION 3/ 63 NOT IN DIRECTORY | | |
23. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 64 (0): Directory (b)

- | | | | |
|--|---|---------------|-----|
| | ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 64 | | |
| | SECTION 3/ 64 NOT IN DIRECTORY | RECORD NUMBER | 785 |
24. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 65 (0): Directory (b)
- | | | | |
|--|---|---------------|-----|
| | ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 65 | | |
| | SECTION 3/ 65 NOT IN DIRECTORY | RECORD NUMBER | 800 |
25. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 66 (0): Directory (b)
- | | | | |
|--|---|---------------|-----|
| | ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 66 | | |
| | SECTION 3/ 66 NOT IN DIRECTORY | RECORD NUMBER | 814 |
26. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 67 (0): Directory (b)
- | | | | |
|--|---|---------------|-----|
| | ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 67 | | |
| | SECTION 3/ 67 NOT IN DIRECTORY | RECORD NUMBER | 828 |
27. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 68 (0): Directory (b)
- | | | | |
|--|---|---------------|-----|
| | ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 68 | | |
| | SECTION 3/ 68 NOT IN DIRECTORY | RECORD NUMBER | 842 |
28. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 69 (0): Directory (b)
- | | | | |
|--|---|---------------|-----|
| | ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 69 | | |
| | SECTION 3/ 69 NOT IN DIRECTORY | RECORD NUMBER | 855 |
29. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 70 (0): Directory (b)
- | | | | |
|--|---|---------------|-----|
| | ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 70 | | |
| | SECTION 3/ 70 NOT IN DIRECTORY | RECORD NUMBER | 868 |
30. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 71 (0): Directory (b)
- | | | | |
|--|---|---------------|-----|
| | ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 71 | | |
| | SECTION 3/ 71 NOT IN DIRECTORY | RECORD NUMBER | 881 |
31. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 72 (0): Directory (b)

- | | | | |
|--|---|---------------|-----|
| | ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 72 | | |
| | SECTION 3/ 72 NOT IN DIRECTORY | RECORD NUMBER | 893 |
32. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 73 (0): Directory (b)
- | | | | |
|--|---|---------------|-----|
| | ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 73 | | |
| | SECTION 3/ 73 NOT IN DIRECTORY | RECORD NUMBER | 905 |
33. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 74 (0): Directory (b)
- | | | | |
|--|---|---------------|-----|
| | ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 74 | | |
| | SECTION 3/ 74 NOT IN DIRECTORY | RECORD NUMBER | 917 |
34. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 75 (0): Directory (b)
- | | | | |
|--|---|---------------|-----|
| | ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 75 | | |
| | SECTION 3/ 75 NOT IN DIRECTORY | RECORD NUMBER | 928 |
35. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 76 (0): Directory (b)
- | | | | |
|--|---|---------------|-----|
| | ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 76 | | |
| | SECTION 3/ 76 NOT IN DIRECTORY | RECORD NUMBER | 939 |
36. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 77 (0): Directory (b)
- | | | | |
|--|---|---------------|-----|
| | ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 77 | | |
| | SECTION 3/ 77 NOT IN DIRECTORY | RECORD NUMBER | 950 |
37. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 78 (0): Directory (b)
- | | | | |
|--|---|---------------|-----|
| | ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 78 | | |
| | SECTION 3/ 78 NOT IN DIRECTORY | RECORD NUMBER | 960 |
38. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 79 (0): Directory (b)
- | | | | |
|--|---|---------------|-----|
| | ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 79 | | |
| | SECTION 3/ 79 NOT IN DIRECTORY | RECORD NUMBER | 970 |
39. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT= 91 (0): Directory (b)

- | | |
|---|-------------------|
| ERROR(S) FOUND IN MAT=3431, MF= 3, MT= 91 | |
| SECTION 3/ 91 NOT IN DIRECTORY | RECORD NUMBER 980 |
40. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT=102 (0): Directory (b)
- | | |
|---|-------------------|
| ERROR(S) FOUND IN MAT=3431, MF= 3, MT=102 | |
| SECTION 3/102 NOT IN DIRECTORY | RECORD NUMBER 989 |
41. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT=103 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3431, MF= 3, MT=103 | |
| SECTION 3/103 NOT IN DIRECTORY | RECORD NUMBER 1016 |
42. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT=104 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3431, MF= 3, MT=104 | |
| SECTION 3/104 NOT IN DIRECTORY | RECORD NUMBER 1030 |
43. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT=105 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3431, MF= 3, MT=105 | |
| SECTION 3/105 NOT IN DIRECTORY | RECORD NUMBER 1042 |
44. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT=106 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3431, MF= 3, MT=106 | |
| SECTION 3/106 NOT IN DIRECTORY | RECORD NUMBER 1051 |
45. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT=107 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3431, MF= 3, MT=107 | |
| SECTION 3/107 NOT IN DIRECTORY | RECORD NUMBER 1062 |
46. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 3, MT=111 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3431, MF= 3, MT=111 | |
| SECTION 3/111 NOT IN DIRECTORY | RECORD NUMBER 1078 |
47. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 2 (0): Directory (b)

- | | |
|--|--------------------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 2 | |
| SECTION 4/ 2 NOT IN DIRECTORY | RECORD NUMBER 1089 |
48. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 16 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 16 | |
| SECTION 4/ 16 NOT IN DIRECTORY | RECORD NUMBER 1315 |
49. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 17 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 17 | |
| SECTION 4/ 17 NOT IN DIRECTORY | RECORD NUMBER 1326 |
50. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 22 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 22 | |
| SECTION 4/ 22 NOT IN DIRECTORY | RECORD NUMBER 1337 |
51. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 28 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 28 | |
| SECTION 4/ 28 NOT IN DIRECTORY | RECORD NUMBER 1348 |
52. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 51 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 51 | |
| SECTION 4/ 51 NOT IN DIRECTORY | RECORD NUMBER 1359 |
53. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 52 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 52 | |
| SECTION 4/ 52 NOT IN DIRECTORY | RECORD NUMBER 1384 |
54. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 53 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 53 | |
| SECTION 4/ 53 NOT IN DIRECTORY | RECORD NUMBER 1407 |
55. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 54 (0): Directory (b)

- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 54 | |
| SECTION 4/ 54 NOT IN DIRECTORY | RECORD NUMBER 1430 |
56. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 55 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 55 | |
| SECTION 4/ 55 NOT IN DIRECTORY | RECORD NUMBER 1453 |
57. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 56 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 56 | |
| SECTION 4/ 56 NOT IN DIRECTORY | RECORD NUMBER 1476 |
58. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 57 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 57 | |
| SECTION 4/ 57 NOT IN DIRECTORY | RECORD NUMBER 1499 |
59. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 58 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 58 | |
| SECTION 4/ 58 NOT IN DIRECTORY | RECORD NUMBER 1522 |
60. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 59 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 59 | |
| SECTION 4/ 59 NOT IN DIRECTORY | RECORD NUMBER 1545 |
61. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 60 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 60 | |
| SECTION 4/ 60 NOT IN DIRECTORY | RECORD NUMBER 1568 |
62. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 61 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 61 | |
| SECTION 4/ 61 NOT IN DIRECTORY | RECORD NUMBER 1591 |
63. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 62 (0): Directory (b)

- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 62 | RECORD NUMBER | 1614 |
| SECTION 4/ 62 NOT IN DIRECTORY | | |
64. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 63 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 63 | RECORD NUMBER | 1637 |
| SECTION 4/ 63 NOT IN DIRECTORY | | |
65. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 64 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 64 | RECORD NUMBER | 1660 |
| SECTION 4/ 64 NOT IN DIRECTORY | | |
66. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 65 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 65 | RECORD NUMBER | 1683 |
| SECTION 4/ 65 NOT IN DIRECTORY | | |
67. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 66 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 66 | RECORD NUMBER | 1706 |
| SECTION 4/ 66 NOT IN DIRECTORY | | |
68. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 67 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 67 | RECORD NUMBER | 1729 |
| SECTION 4/ 67 NOT IN DIRECTORY | | |
69. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 68 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 68 | RECORD NUMBER | 1752 |
| SECTION 4/ 68 NOT IN DIRECTORY | | |
70. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 69 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 69 | RECORD NUMBER | 1775 |
| SECTION 4/ 69 NOT IN DIRECTORY | | |
71. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 70 (0): Directory (b)

- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 70 | RECORD NUMBER | 1798 |
| SECTION 4/ 70 NOT IN DIRECTORY | | |
72. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 71 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 71 | RECORD NUMBER | 1821 |
| SECTION 4/ 71 NOT IN DIRECTORY | | |
73. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 72 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 72 | RECORD NUMBER | 1844 |
| SECTION 4/ 72 NOT IN DIRECTORY | | |
74. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 73 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 73 | RECORD NUMBER | 1867 |
| SECTION 4/ 73 NOT IN DIRECTORY | | |
75. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 74 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 74 | RECORD NUMBER | 1890 |
| SECTION 4/ 74 NOT IN DIRECTORY | | |
76. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 75 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 75 | RECORD NUMBER | 1913 |
| SECTION 4/ 75 NOT IN DIRECTORY | | |
77. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 76 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 76 | RECORD NUMBER | 1936 |
| SECTION 4/ 76 NOT IN DIRECTORY | | |
78. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 77 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 77 | RECORD NUMBER | 1959 |
| SECTION 4/ 77 NOT IN DIRECTORY | | |
79. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 78 (0): Directory (b)

ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 78
SECTION 4/ 78 NOT IN DIRECTORY RECORD NUMBER 1982

80. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 79 (0): Directory (b)

ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 79
SECTION 4/ 79 NOT IN DIRECTORY RECORD NUMBER 2005

81. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 4, MT= 91 (0): Directory (b)

ERROR(S) FOUND IN MAT=3431, MF= 4, MT= 91
SECTION 4/ 91 NOT IN DIRECTORY RECORD NUMBER 2028

82. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 5, MT= 16 (0): Directory (b)

ERROR(S) FOUND IN MAT=3431, MF= 5, MT= 16
SECTION 5/ 16 NOT IN DIRECTORY RECORD NUMBER 2052

83. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 5, MT= 17 (0): Directory (b)

ERROR(S) FOUND IN MAT=3431, MF= 5, MT= 17
SECTION 5/ 17 NOT IN DIRECTORY RECORD NUMBER 2098

84. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 5, MT= 22 (0): Directory (b)

ERROR(S) FOUND IN MAT=3431, MF= 5, MT= 22
SECTION 5/ 22 NOT IN DIRECTORY RECORD NUMBER 2112

85. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 5, MT= 28 (0): Directory (b)

ERROR(S) FOUND IN MAT=3431, MF= 5, MT= 28
SECTION 5/ 28 NOT IN DIRECTORY RECORD NUMBER 2266

86. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=3431, MF= 5, MT= 91 (0): Directory (b)

ERROR(S) FOUND IN MAT=3431, MF= 5, MT= 91
SECTION 5/ 91 NOT IN DIRECTORY RECORD NUMBER 2349

• recent Warnings:

1. Statistical weight of certain L values were incorrect
0: RRR goof (a)

Calculate Cross Sections from Resonance Parameters (RECENT 2015-1)

```
=====
Retrieval Criteria----- MAT
File 2 Mimimum Cross Section- 1.0000E-10 (Standard Option)
Reactions with No Background- Output (Resonance Contribution)
... [315 more lines]
```

• groupie Errors:

1. Very small elastic cross section found
0: Small elastic

Multi-Group and Multi-Band Parameters from ENDF/B Data (GROUPIE 2015-2)

```
-----
ENDF/B Input and Output Data Filenames
ENDFB.IN
ENDFB.OUT
... [97 more lines]
```

• fudge-4.0 Warnings:

1. Missing a channel with a particular angular momenta combination
resonances / resolved (Error # 1): missingResonanceChannel

```
WARNING: Missing a channel with angular momenta combination L = 0, J = 1.5 and S = 1.5 for "capture"
WARNING: Missing a channel with angular momenta combination L = 1, J = 0.5 and S = 1.5 for "capture"
WARNING: Missing a channel with angular momenta combination L = 1, J = 1.5 and S = 0.5 for "capture"
WARNING: Missing a channel with angular momenta combination L = 1, J = 1.5 and S = 1.5 for "capture"
... plus 1 more instances of this message
```

2. Cross section does not match sum of linked reaction cross sections
crossSectionSum label 0: total (Error # 0): CS Sum.

```
WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.20%
```

• fudge-4.0 Errors:

1. The spin statistical weights are off, indicating missing channels
resonances / resolved / MultiLevel_BreitWigner (Error # 0): badSpinStatisticalWeights

```
WARNING: The spin statcal weights for L=1 sums to 1.0, but should sum to 3.0. You have too few channels for re
```

2. Calculated and tabulated Q values disagree.
reaction label 31: n[multiplicity:'2'] + Se75 (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -11183583.4196167 eV vs -1.11663e7 eV!
```

3. Calculated and tabulated Q values disagree.
reaction label 32: n[multiplicity:'3'] + Se74 (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -19211183.97045898 eV vs -1.91987e7 eV!
```

4. Calculated and tabulated Q values disagree.
reaction label 33: n + H1 + As75 (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -9537844.263626099 eV vs -9518930. eV!
```

5. Calculated and tabulated Q values disagree.
reaction label 34: Se77 + gamma (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 7389626.800933838 eV vs 7418390. eV!

6. Calculated and tabulated Q values disagree.
reaction label 35: n + He4 + Ge72 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -5120288.778457642 eV vs -5098490. eV!

7. Calculated and tabulated Q values disagree.
reaction label 36: H1[multiplicity:2'] + Ge75 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -9931480.914367676 eV vs -9914270. eV!

8. Calculated and tabulated Q values disagree.
reaction label 37: H1 + As76_s (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -2209433.390884399 eV vs -2186140. eV!

9. Calculated and tabulated Q values disagree.
reaction label 38: H2 + As75_s (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -7313278.162689209 eV vs -7208810. eV!

10. Calculated and tabulated Q values disagree.
reaction label 39: H3 + As74_s (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -11299806.10884094 eV vs -1.1274e7 eV!

11. Calculated and tabulated Q values disagree.
reaction label 40: He3 + Ge74_s (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -8718744.595748901 eV vs -8692920. eV!

12. Calculated and tabulated Q values disagree.
reaction label 41: He4 + Ge73_s (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 1662651.289794922 eV vs 1688510. eV!

- njoy2012 Warnings:

1. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
grouppr...compute self-shielded group-averaged cross-sections (0): GROUPR/conver (0)

---message from conver---cannot do complete particle production for mt= 16
only mf4/mf5 provided

2. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
grouppr...compute self-shielded group-averaged cross-sections (1): GROUPR/conver (0)

---message from conver---cannot do complete particle production for mt= 17
only mf4/mf5 provided

3. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
group...compute self-shielded group-averaged cross-sections (2): GROUPT/conver (0)

---message from conver---cannot do complete particle production for mt= 22
only mf4/mf5 provided

4. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
group...compute self-shielded group-averaged cross-sections (3): GROUPT/conver (0)

---message from conver---cannot do complete particle production for mt= 28
only mf4/mf5 provided

5. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
group...compute self-shielded group-averaged cross-sections (4): GROUPT/conver (0)

---message from conver---cannot do complete particle production for mt= 91
only mf4/mf5 provided